

Del. 1.00

Work Order ID 91311

October-04-12 1:09:53 PM

91311

Page 1

Item ID: D3183-045
Revision ID:
Item Name: Bearing Assembly

Accept

N900040100

Setup Start *NS1*
Stop *NS2*

Start Date: 04/10/2012 Start Qty: 20.00 *20*
Required Date: 19/10/2012 Req'd Qty: 20.00 *20*

Cust Item ID:
Customer:

Reference:

Approvals: Process Plan: MLS Date: 12-10-04 Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start *NR1*
Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr Revision Nbr

D3183 Rev C1

| | | | | | | | | | |
|--------------------------|---|------|--|--|--|--|--|--|--|
| 100 | | 0.00 | | | | | | | |
| *100* | Hardinge CNC LATHE SMALL | | | | | | | | |
| Hardinge | Memo | 0.00 | | | | | | | |
| Hardinge CNC Lathe Small | Turn D3183-9 Cap as per Folio FA388Deburr | | | | | | | | |

12/11/19

60 0

| | | | | | | | | | |
|-----------------|---|------|--|--|--|--|--|--|--|
| 110 | QC2- Inspect parts off machine FAI/FAIB | 0.00 | | | | | | | |
| *110* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

12/11/19

60 0

| | | | | | | | | | |
|-----------------|-----------------------------------|------|--|--|--|--|--|--|--|
| 120 | QC8- Inspect parts - second check | 0.00 | | | | | | | |
| *120* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

12/11/19

60 0

DAS
08
9-89

Work Order ID 91311

October-04-12 1:09:53 PM

91311

Page 2

Item ID: D3183-045
Revision ID:
Item Name: Bearing Assembly

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 04/10/2012 Start Qty: 20.00
Required Date: 19/10/2012 Req'd Qty: 20.00

20

Cust Item ID:

20

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| | | | | | | | | | |
|-----------|--|------|--|--|--|--|--|--|--|
| 130 | Small Fab | 0.00 | | | | | | | |
| *130* | | | | | | | | | |
| Small Fab | Memo | 0.00 | | | | | | | |
| Small Fab | Press D3183-5 Bearing into D3183-9 Cap as per Dwg D3183. | | | | | | | | |

60x

12/11/20

| | | | | | | | | | |
|-----------------|---|------|--|--|--|--|--|--|--|
| 140 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| *140* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

AS
15
12-11-20

12/11/20

60
count

| | | | | | | | | | |
|-----------|--|------|--|--|--|--|--|--|--|
| 150 | Identify as per dwg & Stock Location: 512 3513 | 0.00 | | | | | | | |
| *150* | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | | | | | | | | | |

12/11/21

60

Work Order ID 91311

October-04-12 1:09:53 PM

91311

Page 3

Item ID: D3183-045

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bearing Assembly

Start Date: 04/10/2012 Start Qty: 20.00

20

Cust Item ID:

Required Date: 19/10/2012 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 160 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *160* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

12/11/22 *[Signature]**mf*

12-11-21

Picklist Print

October-04-12 1:09:56 PM

Page 1

Work Order ID: 91311

91311

Parent Item: D3183-045

D3183-045

Parent Item Name: Bearing Assembly

Start Date: 04/10/2012

Required Date: 19/10/2012

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP A04.02.18New issueKJ/DS

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D3183-5 | | Manufactured | No | | | 110 | Each | 48.0000 | 1 | 20 | | | |

D3183-5

Bearing

**

EB 12/11/20

B92224 (100)

B92196 (500)

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST235B | 48 | |
| 74851 | 1 | |
| 77831 | 1 | |
| 81506 | 19 | |
| 89617 | 27 | |

MDEL RINR1.000

Purchased

No

130

f

44.2229

0.0333

0.701053

MDFI RINR1 000

Delrin Round Bar 1"

**

2.625

12/11/19

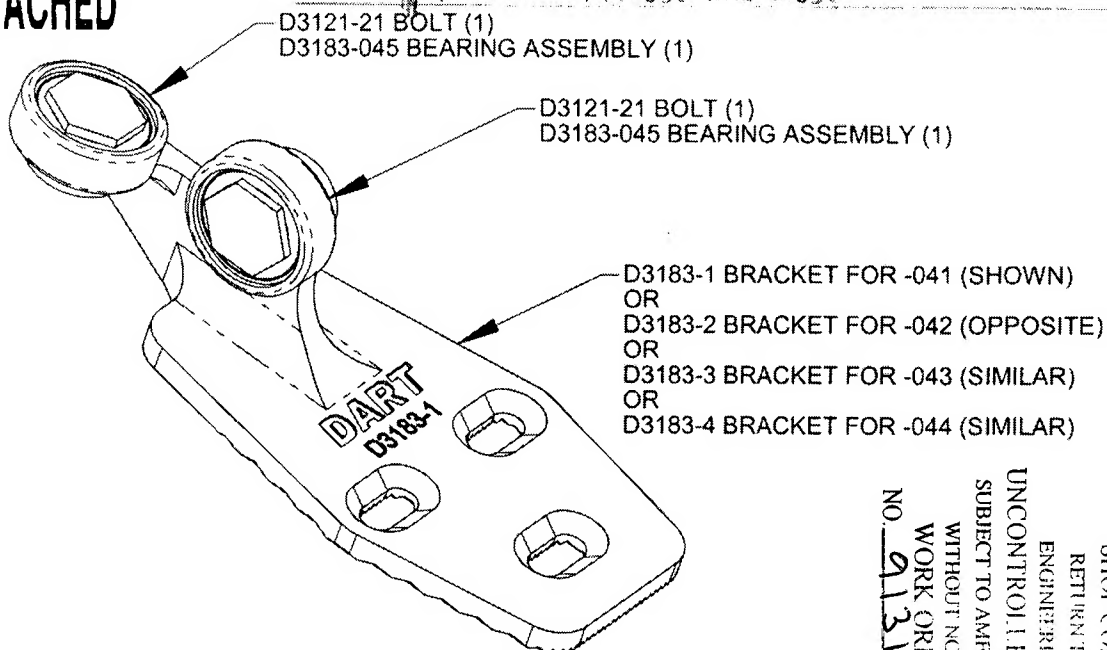
| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| MAT055 | 44.2229 | |
| 117985 | 0.407 | |
| 118392 | 6.2762 | |
| 122582 | 37.5397 | |

2.625



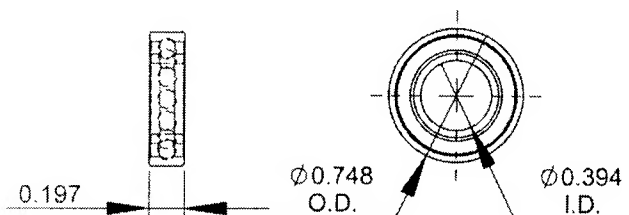
| | | | |
|-------------------------|----------------|--|------------------------|
| DESIGN # | DRAWN BY CP | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED # | APPROVED # | DRAWING NO. D3183 | REV. C SHEET 1 OF 4 |
| DATE 04.02.17 | | TITLE BRACKET ASSEMBLY | SCALE 1:1 |
| A | 03.01.24 | NEW ISSUE | |
| B | 03.06.17 | REMOVE BEARING; 1.012 WS 0.882 | |
| C | 04.02.17 | ADD -045/-9; 0.182 WAS 0.431 | |
| C1 | 04.11.09 | 0.830 WAS 0.850 | |

RELEASED
04 03 01
DEO ATTACHED



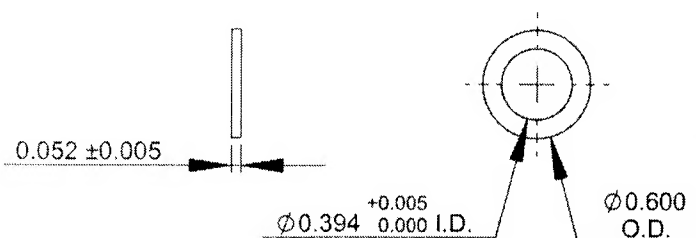
D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 91311 M25
12-10-04



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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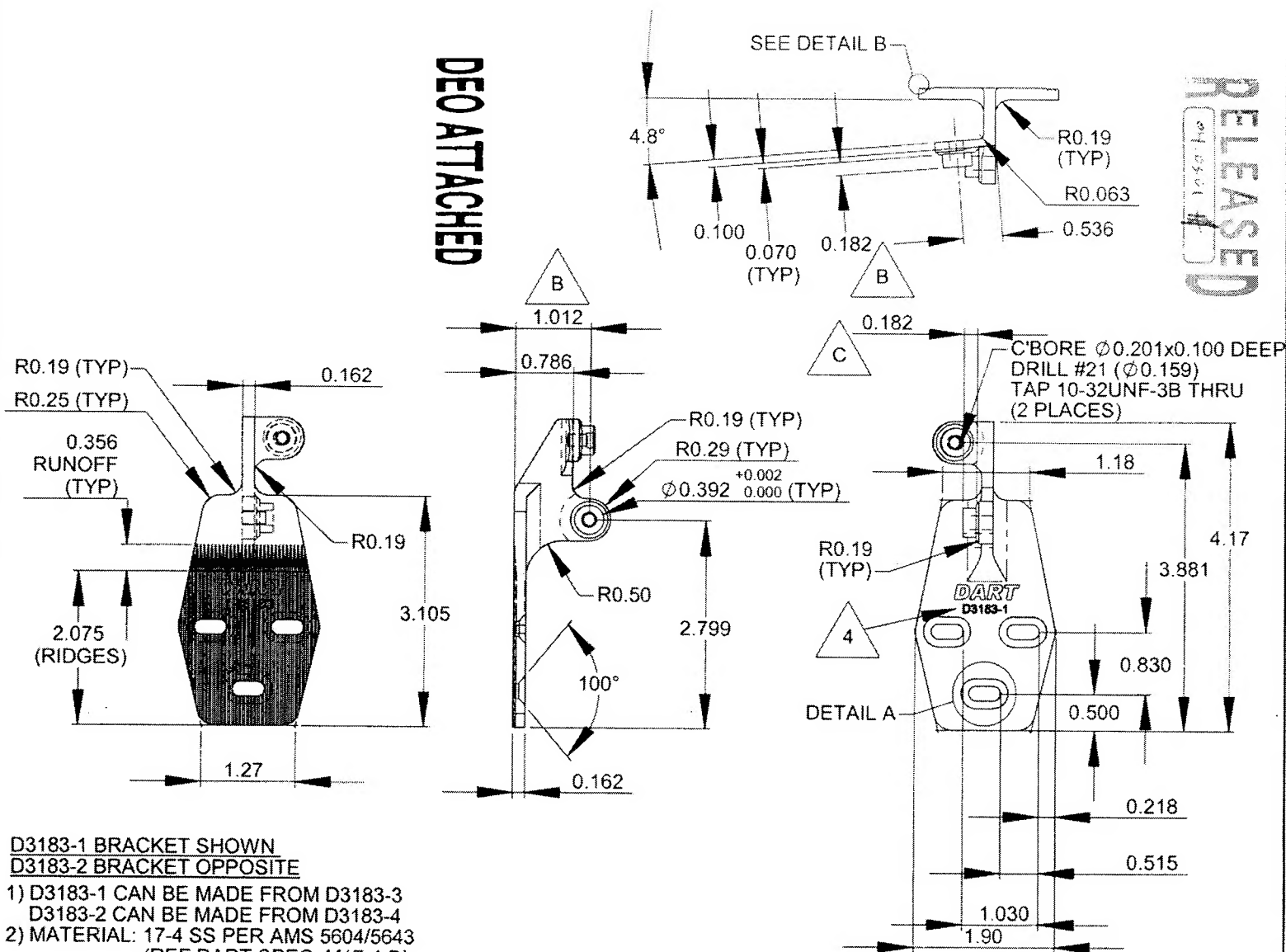
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|----------|------------------|-----------------------------|
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| DATE | DRAWING NO. | REV. C |
| 04.02.17 | D3183 | SHEET 2 OF 4 |
| TITLE | BRACKET ASSEMBLY | SCALE |
| | | 1:2 |

RELEASED

DEO ATTACHED



D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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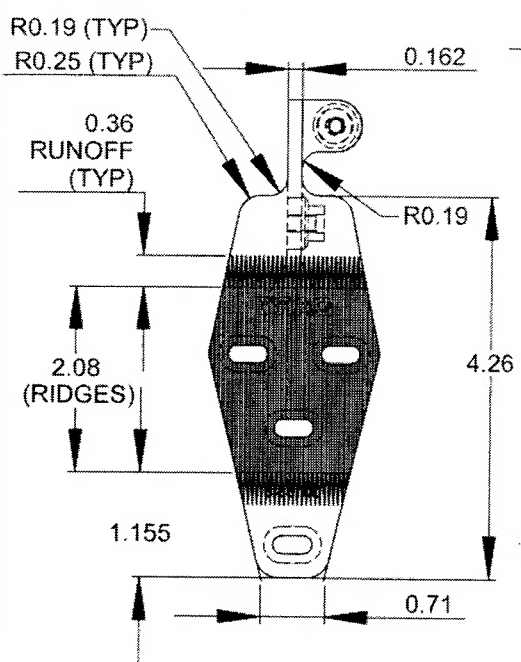
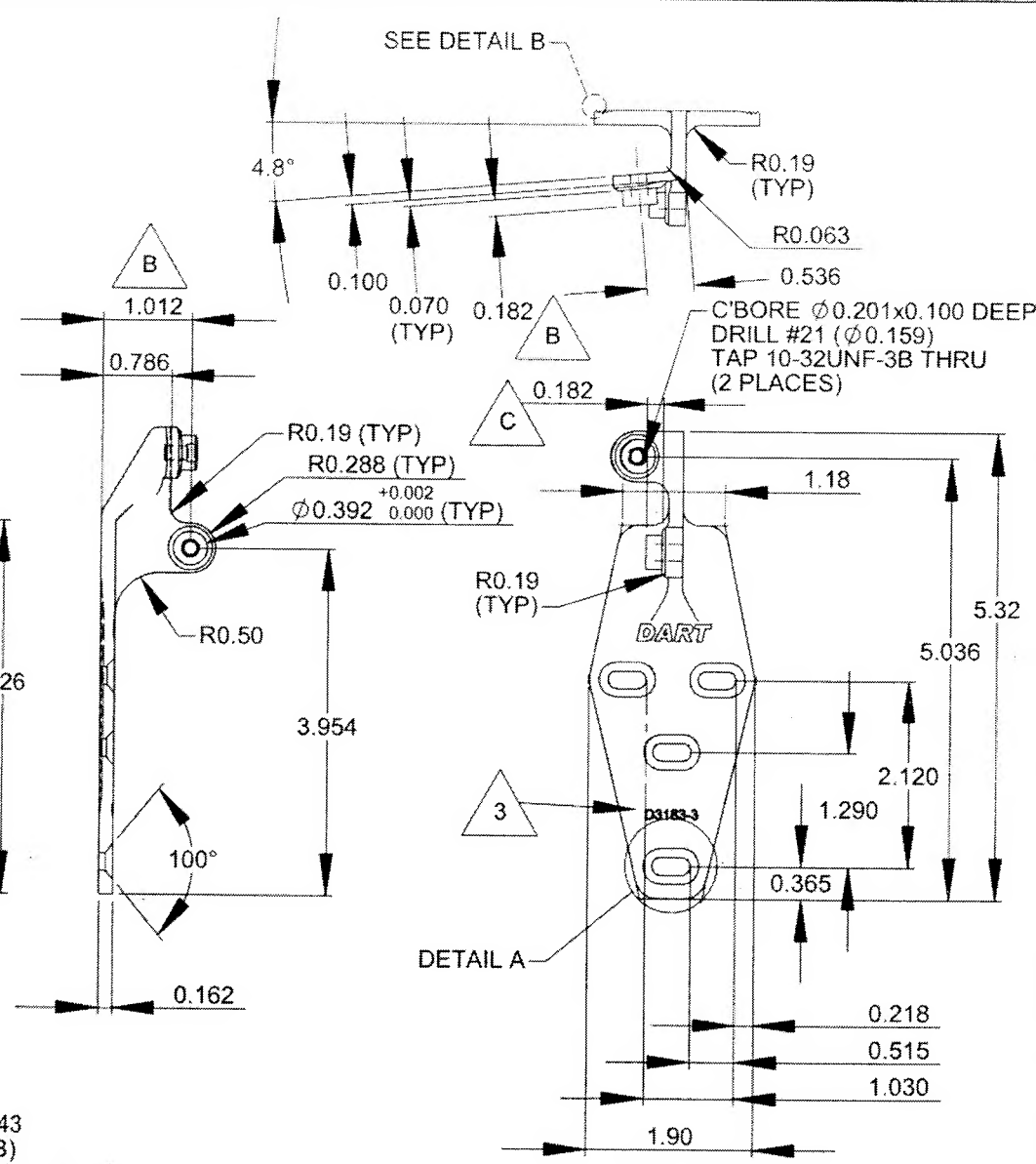
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DART

ORIGINAL ISSUED

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|----------|------------------|-----------------------------|
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| DATE | TITLE | REV. C |
| 04.02.17 | BRACKET ASSEMBLY | SHEET 3 OF 4 |
| | | SCALE 1:2 |



D3183-3 BRACKET SHOWN
 (REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
 (REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643
 (REF DART SPEC. M17-4-B)
 MIN ULTIMATE STRENGTH = 150 ksi
 MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

DEO ATTACHED

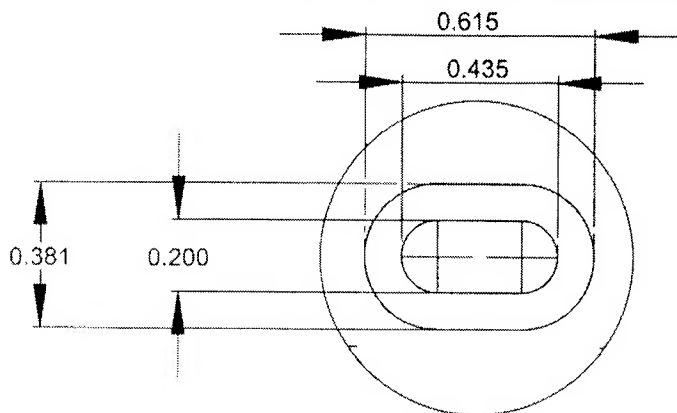
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| | | | |
|----------------------------|-----------------------------|--|------------------------|
| DESIGN <i>[Signature]</i> | DRAWN BY <i>[Signature]</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D3183 | REV. C SHEET 4 OF 4 |
| DATE 04.02.17 | | TITLE BRACKET ASSEMBLY | SCALE 1:1 |

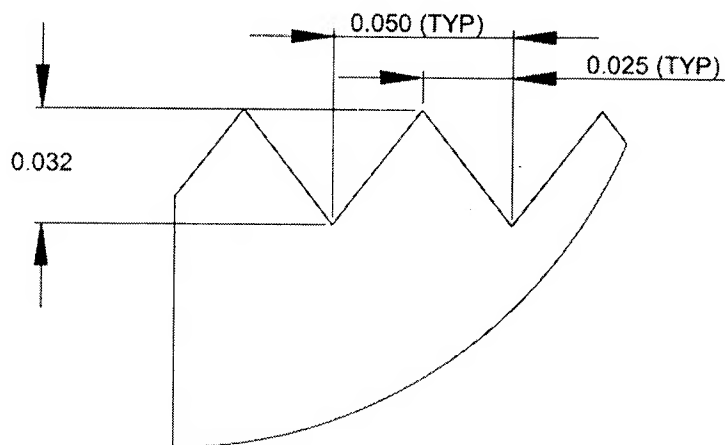


DETAIL A (2 : 1)

RELEASED
04.03.21

DEO ATTACHED

DETAIL B (20 : 1)

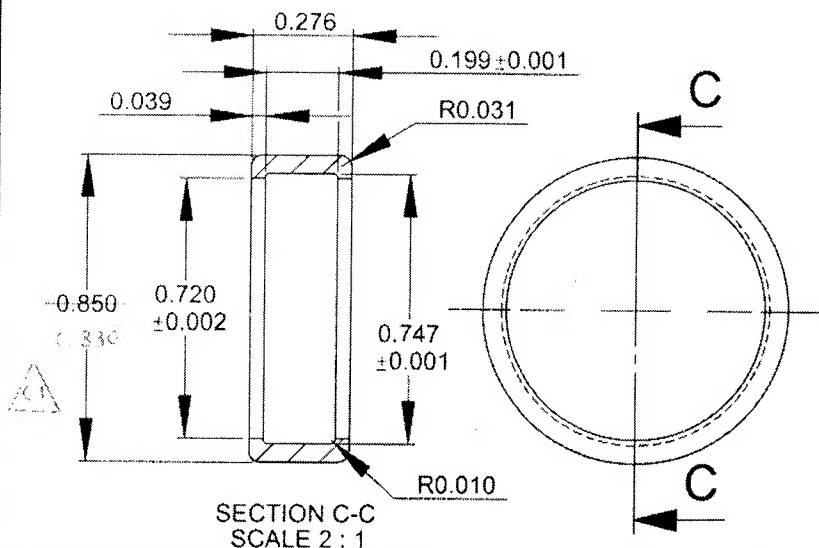


D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP



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91311

91311

| | | | | | | | |
|----------------------|---------------------------|----------------------|---|--|--------------------------|---------------------------|--------------|
| DRAWING NO. D3183 | TITLE BRACKET ASSEMBLY | REV.C1 | DART AEROSPACE LTD ENGINEERING ORDER | | D.E.O. NO. D3183-C1-1 | SHEET NO. SHEET 1 OF 1 | SCALE NTS |
| DRAWN <i>qp</i> | CHECKED <i>js</i> | MFG. APPR. <i>MA</i> | APPROVED <i>MP</i> | | DE APPR. <i>MP</i> | | |
| DATE 10.05.14 | DATE 10.06.30 | DATE 10.06.30 | DATE 10/06/30 | | DATE 10/06/30 | | |

D3183-5 BEARING

ADD POSSIBLE SUPPLIER: KML P/N 6800-ZZ

BASIC LOAD RATING REQUIREMENT: Cr = 1720 N (386 lb) MIN [DYNAMIC]
Cor = 840 N (188 lb) MIN [STATIC]

REF PAR 10-012

RELEASED
2010-07-22
110

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